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(54) Title: MODIFICATION OF HEPATITIS B CORE ANTIGEN

(57) Abstract: A protein is provided comprising hepatitis B core antigen (HBcAg) wherein one or more of the four arginine repeats has been deleted, said protein comprising the C-terminal cysteine of HBcAg. The deleted region may be replaced by an epitope from a protein other than HBcAg, in which case the HBcAg acts as a carrier to present the epitope to the immune system. The chimeric protein is useful in prophylactic and therapeutic vaccination of a host, for example against hepatitis B virus.

INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 C12N15/51 C07K14/02 A61K39/29 A61P31/20

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 C07K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, BIOSIS, WPI Data, PAJ, MEDLINE, CHEM ABS Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	HATTON T ET AL: "RNA AND DNA-BINDING ACTIVITIES IN HEPATITIS B VIRUS CAPSID PROTEIN A MODEL FOR THEIR ROLES IN VIRAL REPLICATION" JOURNAL OF VIROLOGY, vol. 66, no. 9, 1992, pages 5232-5241, XP001041852 ISSN: 0022-538X page 5232, left-hand column, paragraph 2 -right-hand column, paragraph 1 page 5232, right-hand column, paragraph 3 -page 5233, left-hand column, paragraph 2 page 5234; figure 1 page 5234, left-hand column, paragraph 1 -right-hand column, paragraph 1 page 5235, right-hand column, paragraph 3 page 5238; figure 7 --- -/--	1,3-5, 13,17-22

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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International Application No

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 00 26385 A (POWDERJECT VACCINES INC) 11 May 2000 (2000-05-11) page 2, paragraph 1 page 26 -page 28; example 1 page 28 -page 30; example 2 ---	2
A	SCHOEDEL F ET AL: "HYBRID HEPATITIS B VIRUS CORE ANTIGEN AS A VACCINE CARRIER MOIETY: I. PRESENTATION OF FOREIGN EPITOPES" JOURNAL OF BIOTECHNOLOGY, ELSEVIER SCIENCE PUBLISHERS, AMSTERDAM, NL, vol. 44, no. 1/3, January 1996 (1996-01), pages 91-96, XP000891474 ISSN: 0168-1656 page 91 abstract ---	
A	EP 0 421 635 A (WELLCOME FOUND) 10 April 1991 (1991-04-10) cited in the application page 2, line 35 - line 46 ---	
A	BORISOVA G P ET AL: "RECOMBINANT CORE PARTICLES OF HEPATITIS B VIRUS EXPOSING FOREIGN ANTIGENIC DETERMINANTS ON THEIR SURFACE" FEBS LETTERS, ELSEVIER SCIENCE PUBLISHERS, AMSTERDAM, NL, vol. 259, no. 1, 1 December 1989 (1989-12-01), pages 121-124, XP002035980 ISSN: 0014-5793 page 122, left-hand column, paragraph 5 -page 124, left-hand column, paragraph 1 ---	
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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>DATABASE BIOSIS 'Online! BIOSCIENCES INFORMATION SERVICE, PHILADELPHIA, PA, US; 1992 ZHOU S ET AL: "CYS RESIDUES OF THE HEPATITIS B VIRUS CAPSID PROTEIN ARE NOT ESSENTIAL FOR THE ASSEMBLY OF VIRAL CORE PARTICLES BUT CAN INFLUENCE THEIR STABILITY" Database accession no. PREV199294115400 XP002185073 abstract & JOURNAL OF VIROLOGY, vol. 66, no. 9, 1992, pages 5393-5398, ISSN: 0022-538X</p> <p>-----</p>	

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

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